ttorney Docket No. 5308-248

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

re: Saxler et al.

Serial No.: 10/617,843

Filed: July 11, 2003

For: NITRIDE-BASED TRANSISTORS AND METHODS OF FABRICATION THEREOF

USING NON-ETCHED CONTACT RECESSES

Date: August 24, 2004

Group Art Unit: 2823

Confirmation No.: 7985

Examiner: Fernando L. Toledo

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

SIXTH INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. § 1.97(b)

Sir:

AUG 2, 6 2004

Attached is a list of documents on Form PTO-1449, together with a copy of any listed foreign patent document and/or non-patent literature. It is requested that these documents be considered by the Examiner and officially made of record in accordance with the provisions of 37 C.F.R. § 1.56 and Section 609 of the MPEP.

This Information Disclosure Statement is submitted in accordance with 37 C.F.R. § 1.97(b), within three months of the filing date of the above-referenced application or before the mailing of a first Office Action on the merits, whichever event occurs last. Therefore, no fee is believed due. However, the Commissioner is hereby authorized to charge any deficiency or credit any overpayment to Deposit Account No. 50-0220.

Respectfully submitted,

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Substitute f	orm 1449A/PTO		3	Co	omplete if Known	
		- 1		Application Number	10/617,843	
INFURIVATION DISCLUSURES				Filing Date	July 11, 2003	
STATEMENT BY APPLICANT				First Named Inventor	Saxler	
			(V).	Group Art Unit	2823	
(use as many sheets as necessary)			PADEMAR	Examiner Name	Fernando L. Toledo	
Sheet	A1	of	A1	Attorney Docket Number	5308-248	

			J.S. PATENTS A	ND PATENT PUBLICATIONS	
Examiner Initials*	Cite No.	U.S. Patent Document		Name of Patentee or Applicant of Cited	Date of Publication of Cited
		Number	Kind Code (if known)	Document	Document MM-DD-YYYY
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				FOREIGN PA	TENT DOCUMENTS		
Examiner Initials*	Cite No.	Foreign Patent Document			Name of Patentee or Applicant of Cited	Date of Publication	Т
		Office	Number	Kind Code (if known)	Document	of Cited Document MM-DD-YYYY	

		OTHER NON PATENT LITERATURE DOCUMENTS	· -
Examiner Initia l s*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T
	1.	Ben-Yaacov et al., "AlGaN/GaN Current Aperture Vertical Electron Transistors with Regrown Channels," <i>Journal of Applied Physics</i> . Vol. 95, No. 4, pp. 2073-2078 (2004).	
	2.	Burm et al. "Ultra-Low Resistive Ohmic Contacts on <i>n</i> -GaN Using Si Implantation," <i>Applied Physics Letters</i> . Vol. 70, No. 4, 464-66 (1997).	
	3.	Heikman, et al., "Mass Transport Regrowth of GaN for Ohmic Contacts to AlGaN/GaN," <i>Applied Physics Letters</i> . Vol. 78, No. 19, pp. 2876	
	4.	Shen et al., "High-Power Polarization-Engineered GaN/AlGaN/GaN HEMTs Without Surface Passivation," IEEE Electronics Device Letters. Vol. 25, No. 1, pp. 7-9 (2004).	
	5.	United States Patent Application entitled "Co-Doping for Fermi Level Control in Semi-Insulating Group III Nitrides," filed January 7, 2004 (Attorney Docket No. 5308-371).	
	6.	United States Patent Application entitled "Nitride Heterojunction Transistors Having Charge-Transfer Induced Energy Barriers and Methods of Fabricating the Same," Serial No. 10/772,882, filed February 5, 2004 (Attorney Docket No. 5308-389).	
	7.	United States Patent Application entitled "Semiconductor Devices Having a Hybrid Channel Layer, Current Aperture Transistors and Methods of Fabricating the Same," Serial No. 10/849,589, filed May 20, 2004 (Attorney Docket No. 5308-412).	
	8.	United States Patent Application entitled "Methods of Fabricating Nitride-Based Transistors Having Regrown Ohmic Contact Regions and Nitride-Based Transistors Having Regrown Ohmic Contact Regions," Serial No. 10/849,617, filed May 20, 2004 (Attorney Docket No. 5308-413).	
	9.	United States Patent Application entitled "Methods of Fabricating Nitride-Based Transistors with a Cap Layer and a Recessed Gate," filed July 23, 2004 (Attorney Docket No. 5308-392).	
	10.	United States Patent Application entitled "Methods of Having Laterally Grown Active Region and Methods of Fabricating Same," filed July 26, 2004 (Attorney Docket No. 5308-374).	
	11.		

Examiner Signature	Date Considered	